

Section II. (Amendments to the Claims)

Please cancel claims 1-78, and add new claims 79-95, as set out below in the listing of claims 1-95 of the application.

1.-78. (Cancelled)

79. (New) An article comprising a plurality of elongate elements embedded in a bulk matrix, said bulk matrix comprising a first glassy protein.

80. (New) The article according to claim 79 wherein said first glassy protein comprises at least 5 mol % serine.

81. (New) The article according to claim 79, wherein said first glassy protein comprises a protein selected from the group of repetitive block proteins consisting of (a) sericin; (b) *Pseudomonas* *seringae* ice nucleation protein INAZ; (c) *Drosophila* putative chitin binding protein QVEL9 (d) homologs of (a), (b) and (c); and (e) analogs of (a), (b) and (c).

82. (New) The article according to claim 79, wherein said bulk matrix further comprises at least one second glassy protein.

83. (New) The article according to claim 82, wherein said second glassy protein has a same amino acid sequence as said first glassy protein but differs from said first glassy protein by at least 25% in its degree of phosphorylation and/or glycosylation.

84. (New) The article according to claim 79, wherein said bulk matrix further comprises a polymer material.

85. (New) The article according to claim 79, further comprising a coating on a surface of the article that is substantially impermeable to water and water vapor.

86. (New) The article according to claim 79, wherein said elongate elements are selected from the group of fibers consisting of (a) glass fibers, (b) carbon fibers, (d) carbon nanotubes, (e) montmorillonite clay particles, (f) polymers and (g) fibrous proteins.

87. (New) The article according to claim 86, wherein said fibrous proteins are selected from the group of proteins consisting of (a) spider silk proteins; (b) analogs of spider silk proteins; (c) silk-

worm proteins; (d) analogs of silk-worm proteins; (E) regenerated silk protein; (f) mixtures of two or more of (a) to (e), and (g) fibrous proteins.

88. (New) A method of manufacturing an article, comprising the steps of:

(a) preparing, in an aqueous solvent and at a concentration of at least 20 wt %, a solution of a protein capable of forming a glassy state;

(b) contacting a plurality of elongate elements with said solution so that said elongate elements are substantially wetted by said solution;

(c) substantially filling interstices between said elongate elements with said solution; and

(d) drying the product of step (c);

wherein said article comprises elongate elements embedded in a bulk matrix formed by said solution on drying and comprising a glassy protein.

89. (New) The method according to claim 88 wherein step (a) comprises preparing said solution by dissolving substantially purified sericin in an aqueous solvent to a concentration of at least 20 wt %.

90. (New) The method according to claim 88, wherein step (c) is performed by exerting pressure on said solution in the presence of said elongate elements.

91. (New) The method according to claim 88 comprising an additional step prior to step (d), wherein said additional step comprises shaping said plurality of elongate elements over the surface of a mold.

92. (New) The method according to claim 88 comprising an additional step (e) that follows step (d), wherein said additional step comprises applying a coating that is substantially impermeable to water and water vapor.

93. (New) The method according to claim 88, further comprising a step of treating said solution of the protein capable of forming a glassy state, with a solution containing silicate ions.

94. (New) The method according to claim 88, further comprising a step of treating said solution of the protein capable of forming a glassy state, with a solution containing calcium ions.

95. (New) A method of manufacturing a laminate comprising the steps of:

- (a) preparing, in an aqueous solvent and at a concentration of at least 20 wt %, a solution of a protein capable of forming a glassy state;
- (b) preparing a plurality of layers of substantially planar sheets, said substantially planar sheets comprising a plurality of elongate elements;
- (c) contacting said substantially planar sheets with said solution so that said elongate elements are substantially wetted by said solution;
- (d) substantially filling interstices between said elongate elements and interstices between the sheets of said plurality of substantially planar sheets, with said solution; and
- (e) drying said substantially planar sheets.